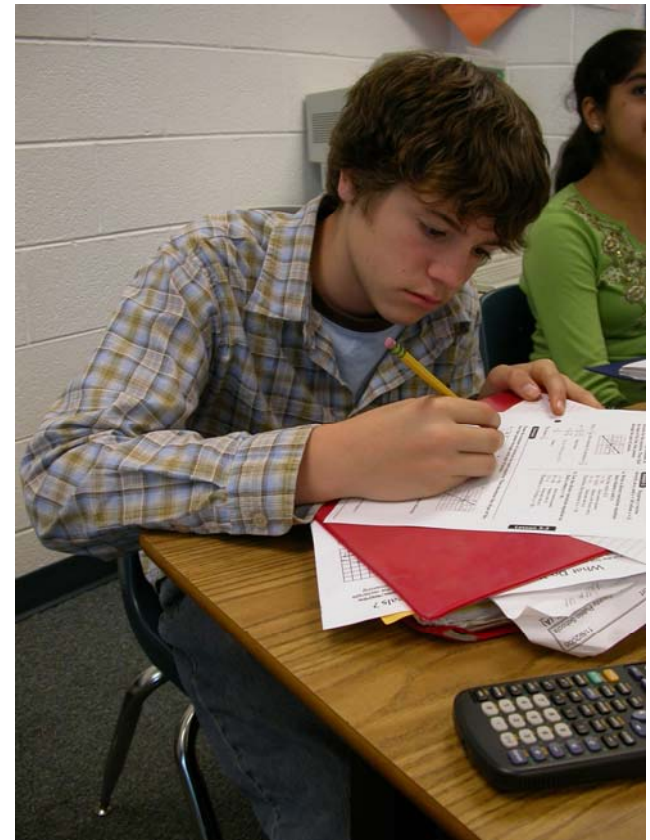




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Fair Isn't Always
Equal:
Differentiated
Assessment and
Grading



Define Each Grade

A:

B:

C:

D:

E or F:

Prompt:

Write an essay that provides a general overview of what we've learned about DNA in our class so far. You may use any resources you wish, but make sure to explain each of the aspects of DNA we've discussed.

Student's Response:

Deoxyribonucleic Acid, or DNA, is the blueprint for who we are. Its structure was discovered by Watson and Crick in 1961. Watson was an American studying in Great Britain. Crick was British (He died last year). DNA is shaped like a twisting ladder. It is made of two nucleotide chains bonded to each other. The poles of the ladder are made of sugar and phosphate but the rungs of the ladder are made of four bases. They are thymine, guanine, and cytosine, and adenine. The amount of adenine is equal to the amount of thymine (A=T). It's the same with cytosine and guanine (C=G).

(Continued on the next slide)

The sequence of these bases makes us who we are. We now know how to rearrange the DNA sequences in human embryos to create whatever characteristics we want in new babies – like blue eyes, brown hair, and so on, or even how to remove hereditary diseases, but many people think it's unethical (playing God) to do this, so we don't do it. When DNA unzips to bond with other DNA when it reproduces, it sometimes misses the re-zipping order and this causes mutations. In humans, the DNA of one cell would equal 1.7 meters if you laid it out straight. If you laid out all the DNA in all the cells of one human, you could reach the moon 6,000 times!

Conclusions from Sample DNA Essay Grading

The fact that a range of grades occurs among teachers who grade the same product suggests that:

- Assessment can only be done against commonly accepted and clearly understood criteria.**
- Grades are relative.**
- Teachers have to be knowledgeable in their subject area in order to assess students properly.**
- Grades are subjective and can vary from teacher to teacher.**
- Grades are not always accurate indicators of mastery.**

“The score a student receives on a test is more dependent on who scores the test and how they score it than it is on what the student knows and understands.”

-- Marzano, *Classroom Assessment & Grading That Work*
(CAGTW), p. 30

DIFFERENTIATED INSTRUCTION

Four Questions on DI:

1. What if we differentiated instruction for all students, kindergarten through 12th grade? What kind of person would we graduate from our schools?
2. What if we never differentiated instruction for all students, Kindergarten through 12th grade? What kind of person would we graduate from our schools?
3. Is the real world differentiated?
4. Did our own teachers differentiate for us when we were students?

No Wonder We Need to Differentiate in our Schools:

In the world beyond school, we don't have to be good at everything. We have specific skills that match the needs of a specific job, and we have plenty of adult experience and maturity.

As children in school, however, we have to be good at everything regardless of our skill set or background, and we have little experience or maturity.

Differentiated instruction and
standardized tests –

NOT an oxymoron!

The only way students will do well on tests is if they learn the material. DI maximizes what students learn. DI and standardized testing are mutually beneficial.

Definition

Differentiating instruction is doing what's fair for students. It's a collection of best practices strategically employed to maximize students' learning at every turn, including giving them the tools to handle anything that is undifferentiated. It requires us to do different things for different students some, or a lot, of the time. It's whatever works to advance the student if the regular classroom approach doesn't meet students' needs. It's highly effective teaching.

Is it Fair?

- **The teacher gives one student a graphic organizer in order to aid his understanding of text. He does not give the organizer to the rest of the class – they don't seem to need it. The class and the student do well on the unit test. Is the grade on the test fair for everyone involved?**

Components of Blood Content Matrix

	Red Cells	White Cells	Plasma	Platelets
Purpose				
Amount				
Size & Shape				
Nucleus ?				
Where formed				

What is fair...

...isn't always equal.

MASTERY

What is Mastery?

“Tim was so learned, that he could name a horse in nine languages; so ignorant, that he bought a cow to ride on.”

Ben Franklin, 1750, *Poor Richard's Almanac*

“Understanding involves the appropriate application of concepts and principles to questions or problems posed.”

-- Howard Gardner, 1991

“Real comprehension of a notion or a theory -- implies the reinvention of this theory by the student...True understanding manifests itself by spontaneous applications.” -- Jean Piaget

From the Center for Media Literacy in New Mexico –

“If we are literate in our subject, we can:

**access (understand and find meaning in),
analyze,
evaluate,
and create
the subject or medium.”**

From *Understanding By Design*
(Wiggins, McTighe)

The Six Facets of True Understanding:

Explanation

Interpretation

Application

Perspective

Empathy

Self-knowledge

Working Definition of Mastery

(Wormeli)

Students have mastered content when they demonstrate a thorough understanding as evidenced by doing something substantive with the content beyond merely echoing it. Anyone can repeat information; it's the masterful student who can break content into its component pieces, explain it and alternative perspectives regarding it cogently to others, and use it purposefully in new situations.

Non-Mastery...

- **The student can repeat the multiplication tables through the 12's**

...and Mastery

- **The student can hear or read about a situation that requires repeated addition and identifies it as a multiplication opportunity, then uses multiplication accurately to shorten the solution process.**

Non-mastery...

- **A student prepares an agar culture for bacterial growth by following a specific procedure given to her by her teacher. She calls the experiment a failure when unknown factors or substances contaminate the culture after several weeks of observation.**

...and Mastery

- **A student accounts for potentially contaminating variables by taking extra steps to prevent anything from affecting an agar culture on bacterial growth she's preparing, and if accidental contamination occurs, she adjusts the experiment's protocols when she repeats the experiment so that the sources of the contamination are no longer a factor.**

Non-mastery...

- **The student uses primarily the bounce pass in the basketball game regardless of its potential effectiveness because that's all he knows how to do.**

...and Mastery

- **The student uses a variety of basketball passes during a game, depending on the most advantageous strategy at that moment in the game.**

Non-mastery...

- **The students can match each of the following parts of speech to its definition accurately: noun, pronoun, verb, adverb, adjective, preposition, conjunction, gerund, and interjection.**

...and Mastery

- **The student can point to any word in the sentence and explain its role (impact) in the sentence, and explain how the word may change its role, depending on where it's placed in the sentence.**

Consider Gradations of Understanding and Performance from Introductory to Sophisticated

Introductory Level Understanding:

Student walks through the classroom door while wearing a heavy coat. Snow is piled on his shoulders, and he exclaims, “Brrrr!” From depiction, we can infer that it is cold outside.

Sophisticated level of understanding:

Ask students to analyze more abstract inferences about government propaganda made by Remarque in his wonderful book, *All Quiet on the Western Front*.

- Determine the surface area of a cube.
 - Determine the surface area of a rectangular prism (a rectangular box)
 - Determine the amount of wrapping paper needed for another rectangular box, keeping in mind the need to have regular places of overlapping paper so you can tape down the corners neatly
 - Determine the amount of paint needed to paint an entire Chicago skyscraper, if one can of paint covers 46 square feet, and without painting the windows, doorways, or external air vents.
-

- Define vocabulary terms.
- Compare vocabulary terms.
- Use the vocabulary terms correctly.
- Use the vocabulary terms strategically to obtain a particular result.

- Identify characteristics of Ancient Sumer
 - Explore the interwoven nature between religion and government in Sumer
 - Explain the rise and fall of city-states in Mesopotamia
 - Trace modern structures/ideas back to their roots in the birthplace of civilization, the Fertile Crescent.
-

- Identify parts of a cell.
- Explain systems within a cell and what functions they perform.
- Explain how a cell is part of a larger system of cells that form a tissue
- Demonstrate how a cell replicates itself.
- Identify what can go wrong in mitosis.
- List what we know about how cells determine what kind of cell they will become.
- Explain how knowledge of cells helps us understand other physiology.

- 1. Multiply fractions.**
- 2. Multiply mixed numbers.**
- 3. Multiply mixed numbers and whole numbers.**
- 4. Critique the solutions of five students' work as they multiply mixed numbers.**
- 5. Multiply mixed numbers and decimals.**
- 6. Divide fractions.**
- 7. Divide mixed numbers.**
- 8. Divide mixed numbers and whole numbers.**
- 9. Given similar problems completed by anonymous students, identify any errors they've made and how you would re-teach them how to do the problems correctly.**

Choose the best assessment:

- 1. On the sphere provided, draw a latitude/longitude coordinate grid. Label all major components.**
- 2. Given the listed latitude/longitude coordinates, identify the countries. Then, identify the latitude and longitude of the world capitols and bodies of water that are listed.**
- 3. Write an essay about how the latitude/longitude system came to be.**
- 4. In an audio-visual presentation, explain how our system of latitude and longitude would need to be adjusted if Earth was in the shape of a peanut? (narrow middle, wider edges)**
- 5. Create a collage or mural that represents the importance of latitude and longitude in the modern world.**

“The student will compare the United States Constitution system in 1789 with forms of democracy that developed in ancient Greece and Rome, in England, and in the American colonies and states in the 18th century.”

--Virginia, Grade 12, United States and Virginia Government

Sample Mastery Skills: Inferring an author's meaning

- Recognize and use context clues**
- Identify an author's purpose**
- Identify the intended audience for writing**
- Activate prior knowledge on the subject and consider how the text fits with what we know**
- Make predictions that are more than wild guesses; they're based on sound reasoning**
- Use background information to make sense of new material**

Acceptable Evidence

- **Spelling test non-example**
 - **No echoing or parroting**
-

- | | |
|----------------------|-------------------|
| • Elaboration | • Analysis |
| • Application | • Creation |
| • Explanation | |
| • Critique | |

“Look-fors” for Assessing Insightful Student Responses

- **Other ways to look at and define the problem**
- **A potentially more powerful principle than the one taught or on the table**
- **The tacit assumptions at work that need to be made explicit**
- **Inconsistency in current versus past discussion**
- **Author intent, style, and bias**
- **Comparison and contrast, not just description**
- **Novel implications**
- **How custom and habit are influencing the views, discussion, or approach to the problem to date**

[From Understanding By Design, p. 82, Wiggins and McTighe]

E.E.K. a.k.a. K.U.D.

Essential and Enduring Knowledge (E.E.K.),
concepts, and skills

Know, Understand, able to Do (K.U.D. or
K.U.D.O.S.)

E.E.K. in Question Form

Essential questions are larger questions that transcend subjects, are usually interesting to ponder, and have more than one answer. They are often broken down into component pieces for our lessons. There are usually one to five essential questions per unit of study. Here's an example for a unit on the Reconstruction era following the Civil War:

EQ: "How does a country rebuild itself after Civil War?"

Potential focus areas to teach students as they answer the question:

State versus Federal government rights and responsibilities, the economic state of the country at the time, the extent of resources left in the country after the war, the role of the military and industry, the effects of grassroots organizations established to help, the influence of the international scene at the time, public reaction to Lincoln's assassination, state secession, southern and northern resentment for one another, fallout from the Emancipation Proclamation

K.U.D. (Samples)

Know -- A prepositional phrase consists of a preposition, modifiers, and the object of the preposition.

Understand -- Energy is transferred from the sun to higher order animals via photosynthesis in the plant (producer) and the first order consumers that eat those plants. These animals are then consumed by higher order animals. When those animals die, the energy is transferred to the soil and subsequent plant via scavengers and decomposers. It's cyclical in nature."

Do -- When determining a percentage discount for a market item, students first change the percentage into a decimal by dividing by one hundred, then multiply the decimal and the item price. This amount is subtracted from the list price to determine the new, discounted cost of the item."

To Get Guidance on What is Essential and Enduring, Consult:

- **standards of learning (*What skills and content within this standard will be necessary to teach students in order for them to demonstrate mastery of the standard?*)**
- **programs of study**
- **curriculum guides**
- **pacing guides**
- **other teacher's tests**
- **professional journals**
- **Mentor or colleague teachers**
- **textbook scope and sequence**
- **textbook end-of-chapter reviews and tests**
- **subject-specific on-line listservs**
- **professional organizations**
- **quiet reflection**

ASSESSMENT



**Don't take time to assess,
unless you are going to take action
with what you discover.**

MEMORY (Continued)

Avoid Confabulation

The brain seeks wholeness. It will fill in the holes in partial learning with made-up learning and experiences, and it will convince itself that this was the original learning all along. To prevent this:



Deal with Misconceptions!

Consider:

- **The Latin root of assessment is, “assidere,” which means, “to sit beside.”**
- **From Assessment expert, Doug Reeves:**

“Too often, educational tests, grades, and report cards are treated by teachers as autopsies when they should be viewed as physicals.”

Feedback vs Assessment

Feedback: Telling a person what they did –
no evaluative component

Assessment: Gathering data in order to
make a decision

Greatest Impact on Student Success:

Formative feedback

What does our understanding of feedback mean for our use of homework?

Is homework more formative or summative in nature? Whichever it is, its role in determining grades will be dramatically different.

Be clear: We grade against standards, not routes students take or techniques teachers use to achieve those standards.

What does this mean we should do with class participation or discussion grades?

Teacher Action	Result on Student Achievement
Just telling students # correct and incorrect	Negative influence on achievement
Clarifying the scoring criteria	Increase of 16 percentile points
Providing explanations as to why their responses are correct or incorrect	Increase of 20 percentile points
Asking students to continue responding to an assessment until they correctly answer the items	Increase of 20 percentile points
Graphically portraying student achievement is associated with an increase of 26 percentile points.	Increase of 26 percentile points

-- Marzano, CAGTW, pgs 5-6

Pre-Assessments

**Used to indicate students' readiness
for content and skill development.**

Used to guide instructional decisions.

Formative Assessments

These are in-route checkpoints, frequently done. They provide ongoing and clear feedback to students and the teacher, informing instruction and reflecting subsets of the essential and enduring knowledge. They are where successful differentiating teachers spend most of their energy – assessing formatively and providing timely feedback to students and practice.

Sample Formative Assessments

Topic: Verb Conjugation

Sample Formative Assessments:

- **Conjugate five regular verbs.**
- **Conjugate five irregular verbs.**
- **Conjugate a verb in Spanish, then do its parallel in English**
- **Answer: Why do we conjugate verbs?**
- **Answer: What advice would you give a student learning to conjugate verbs?**
- **Examine the following 10 verb conjugations and identify which ones are done incorrectly.**

Sample Formative Assessments

Topic: Balancing Chemical Equations

Formative Assessments:

- **Define reactants and products, and identify them in the equations provided.**
- **Critique how Jason calculated the number of moles of each reactant.**
- **Balance these sample, unbalanced equations.**
- **Answer: What do we mean by balancing equations?**
- **Explain to your lab partner how knowledge of stoichiometric coefficients help us balance equations**
- **Prepare a mini-poster that explains the differences among combination, decomposition, and displacement reactions.**

Summative Assessments

These are given to students at the end of the learning to document growth and mastery. They match the learning objectives and experiences, and they are negotiable if the product is not the literal standard. They reflect most, if not all, of the essential and enduring knowledge. They are not very helpful forms of feedback.

Tips for Planning Assessments

- **Correlate all formal assessments with objectives.**
- **While summative assessments may be large and complex, pre-assessments usually are not.**
- **Get ideas for pre- and formative assessments from summative assessments.**
- **Spend the majority of your time designing/emphasizing formative assessments and the feedback they provide.**

Tips for Planning Assessments – Planning Sequence

- **Design summative assessments first, then design your pre- and formative assessments.**
- **Give pre-assessments several days or a week PRIOR to starting the unit.**
- **Design your lesson plans AFTER reviewing pre-assessment data.**

Lesson Designs:

Suggested Planning Sequence

- 1. Identify your essential and enduring knowledge**
- 2. Identify your students with unique needs, and what they will need in order to achieve: change *content, process, or product*?**
- 3. Identify formative and summative assessments – useful feedback**

Lesson Designs

[Continued]

- 4. Design the learning experiences**
- 5. Run a mental tape of each step in the lesson sequence -- Check lesson(s) against criteria for successful differentiated instruction – Revise as necessary.**

Lesson Designs

[Continued]

- 6. Review plan with colleague.**
- 7. Obtain/Create materials needed.**
- 8. Conduct the lesson.**
- 9. Evaluate and Revise plans for tomorrow's lesson.**

How do we know an assessment assesses what we want it to assess?

- We do the task ourselves, then circle the portions of our responses that elicit the essential and enduring knowledge.**
- We read the essential and enduring knowledge, then check off on the assessment where demonstration of that knowledge is required.**
- We ask someone else to compare the lesson's essential and enduring knowledge to the assessment to make sure they're in sync.**

Evaluating the Usefulness of Assessments

- **What are your essential and enduring skills and content you're trying to assess?**
- **How does this assessment allow students to demonstrate their mastery?**
- **Is every component of that objective accounted for in the assessment?**
- **Can students respond another way and still satisfy the requirements of the assessment task? Would this alternative way reveal a student's mastery more truthfully?**
- **Is this assessment more a test of process or content? Is that what you're after?**

Don't Confuse Correlation with Causation

- **Correlation -- If teachers use best practices, students will learn and increase the likelihood of good performance on state tests.**
- **Causality -- Because we have state tests, our students are learning at high levels.**

Don't Confuse Correlation with Causation

“It would be ludicrous to practice the doctor’s physical exam as a way of becoming fit and well. The reality is the opposite: If we are physically fit and do healthy things, we will pass the physical. The separate items on the physical are not meant to be taught and crammed for; rather, they serve as indirect measures of our normal healthful living. Multiple-choice answers correlate with more genuine abilities and performance; yet mastery of those test items doesn’t cause achievement.”

-- P. 132, *Understanding By Design*

Clear and Consistent Evidence

We want an accurate portrayal of a student's mastery, not something clouded by a useless format or distorted by only one opportunity to reveal understanding.

Differentiating teachers require accurate assessments in order to differentiate successfully.

Be Substantive – Avoid Fluff

Fluff Assignment:

Make an acrostic poem about chromatography using each of its letters.

Substantive Assignment:

Explain how chromatography paper separates colors into their component colors, and identify one use of chromatography in a profession of your choosing.

Be Substantive – Avoid Fluff

Fluff Assignment:

Define the terms, “manifest destiny” and “imperialism” and use them properly in a sentence.

Substantive Assignment:

Identify one similarity and one difference between the concepts of manifest destiny and imperialism, then explain to what extent these two concepts are alive and well in the modern world.

**Great differentiated assessment
is never kept in the dark.**

**“Students can hit any target they
can see and which stands still for
them.”**

-- Rick Stiggins, Educator and Assessment expert

**If a child ever asks, “Will this be on
the test?”.....we haven’t done our job.**

Successful Assessment is Authentic in Two Ways

- **The assessment is close to how students will apply their learning in real-world applications.**
- **The assessment must be authentic to how students are learning.**

Successful Assessments are Varied and They are Done Over Time

- **Assessments are often snapshot-in-time, inferences of mastery, not absolute declarations of exact mastery**
- **When we assess students through more than one format, we see different sides to their understanding. Some students' mindmaps of their analyses of Renaissance art rivals the most cogent, written versions of their classmates.**

Potential distractions on assessment day:

**growling stomach, thirst, exhaustion, illness,
emotional angst over:**

**parents/friends/identity/tests/college/politics/
birthday/sex/blogs/parties/sports/projects/homework/self-esteem/acne/holiday/report
cards/future career/money/disease**

**It's reasonable to allow students every
opportunity to show their best side, not just
one opportunity.**

Student Self-Assessment Ideas

- **Make the first and last task/prompt/assessment of a unit the same, and ask students to analyze their responses to each one, noting where they have grown.**
- **Likert-scale surveys (“Place an X on the continuum: Strongly Disagree, Disagree, ‘Not Sure, Agree, Strongly Agree”) and other surveys. Use “smiley” faces, symbols, cartoons, text, depending on readiness levels.**
- **Self-checking Rubrics**
- **Self-checking Checklists**
- **Analyzing work against standards**
- **Videotaping performances and analyzing them**
- **Fill in the blank or responding to self-reflection prompts (see examples that follow)**
- **Reading notations**

Student Self-Assessment Ideas

- **“How Do I Know I Don’t Understand?”**
Criteria: Can I draw a picture of this? Can I explain it to someone else? Can I define the important words and concepts in the piece? Can I recall anything about the topic? Can I connect it to something else we’re studying or I know?

[Inspired by Cris Tovani’s book, *I Read It, But I Don’t Get It*, Stenhouse, 2001]

- **Asking students to review and critique previous work**
- **Performing in front of a mirror**

Student Self-Assessment Ideas: Journal Prompts

I learned that....

I wonder why...

An insight I've gained is...

I've done the following to make sure I understand what is being taught...

I began to think of...

I liked...

I didn't like...

The part that frustrated me most was...

The most important aspect/element/thing in this subject is....

A noticed a pattern in....

I know I learned something when I...

I can't understand...

I noticed that...

I was surprised...

Before I did this experience, I thought that....

What if...

I was confused by...

It reminds me of...

This is similar to....

I predict...

I changed my thinking about this topic when...

A better way for me to learn this would be...

A problem I had and how I overcame it was...

I'd like to learn more about...

Portfolios

Portfolios can be as simple as a folder of collected works for one year or as complex as multi-year, selected and analyzed works from different areas of a student's life. portfolios are often showcases in which students and teachers include representative samples of students' achievement regarding standards and learning objectives over time. They can be on hardcopy or electronic, and they can contain non-paper artifacts as well. They can be places to store records, attributes, and accomplishments of a student, as well as a place to reveal areas in need of growth. They can be maintained by students, teachers, or a combination of both. Though they are stored most days in the classroom, portfolios are sent home for parent review at least once a grading period.

Guiding Questions for Rubric Design:

- Does the rubric account for everything we want to assess?
- Is a rubric the best way to assess this product?
- Is the rubric tiered for this student group's readiness level?
- Is the rubric clearly written so anyone doing a "cold" reading of it will understand what is expected of the student?
- Can a student understand the content yet score poorly on the rubric? If so, why, and how can we change the rubric to make sure it doesn't happen?

Guiding Questions for Rubric Design:

- Can a student understand very little content yet score well on the rubric? If so, how can we change that so it doesn't happen?
- What are the benefits to us as teachers of this topic to create a rubric for our students?
- How do the elements of this rubric support differentiated instruction?
- What should we do differently the next time we create this rubric?

“Metarubric Summary”

To determine the quality of a rubric, examine the:

- **Content** -- Does it assess the important material and leave out the unimportant material?
- **Clarity** -- Can the student understand what's being asked of him, Is everything clearly defined, including examples and non-examples?
- **Practicality** -- Is it easy to use by both teachers and students?
- **Technical quality/fairness** -- Is it reliable and valid?
- **Sampling** -- How well does the task represent the breadth and depth of the target being assessed?

(p. 220). Rick Stiggins and his co-authors of Classroom Assessment for Student Learning (2005)

Designing a Rubric

1. Identify the essential and enduring content and skills you will expect students to demonstrate. Be specific.
2. Identify what you will accept as acceptable evidence that students have mastered content and skills. This will usually be your summative assessments and from these, you can create your pre-assessments.
3. Write a descriptor for the highest performance possible.

Holistic or Analytic?

Task: Write an expository paragraph.

- Holistic: One descriptor for the highest score lists all the elements and attributes that are required.
- Analytic: Create separate rubrics (levels of accomplishment with descriptors) within the larger one for each subset of skills, all outlined in one chart. Examples for the paragraph prompt: Content, Punctuation and Usage, Supportive Details, Organization, Accuracy, and Use of Relevant Information.

Holistic or Analytic?

Task: Create a drawing and explanation of atoms.

- Holistic: One descriptor for the highest score lists all the features we want them to identify accurately.
- Analytic: Create separate rubrics for each subset of features –
 - Anatomical Features: protons, neutrons, electrons and their ceaseless motion, ions, valence
 - Periodic Chart Identifiers: atomic number, mass number, period
 - Relationships and Bonds with other Atoms: isotopes, molecules, shielding, metal/non-metal/metalloid families, bonds – covalent, ionic, and metallic.

Designing a Rubric

4. Determine the label for each level of the achievement.
Consider using three, four, or six levels instead of five.

Examples of successful rubric descriptor labels:

- Proficient, capable, limited, poor
- Sophisticated, mature, good, adequate, developing, naïve
- Exceptional, strong, capable, developing, beginning, emergent
- exceeds standard, meets standard, making progress, getting started, no attempt
- exemplary, competent, satisfactory, inadequate, unable to begin effectively, no attempt



Designing a Rubric

Caution: Descriptor terms need to be parallel; it's important to keep the part of speech consistent. Use all adjectives or all adverbs, not a mixture of parts of speech.

Example of Poorly Done Scale:

Top, adequately, average, poorly, zero

Designing a Rubric

5. “Test drive” the rubric with real student products. Remember, there is no perfect rubric.

- Alternative: Focus on the highest performance descriptor, writing it out in detail, then indicate relative degrees of accomplishment for each of the other levels. For example, a 3.5 out of a 5.0 rubric would indicate adequate understanding but with significant errors in some places. The places of confusion would be circled for the student in the main descriptor for the 5.0 level.

Rubric for the Historical Fiction Book Project – Holistic-style

5.0 Standard of Excellence:

- All material relating to the novel was accurate
- Demonstrated full understanding of the story and its characters
- Demonstrated attention to quality and craftsmanship in the product
- Product is a realistic portrayal of media used (examples: postcards look like postcards, calendar looks like a real calendar, placemats can function as real placemats)
- Writing is free of errors in punctuation, spelling, capitalization, and grammar
- Had all components listed for the project as described in the task

4.5, 4.0, 3.5, 3.0, 2.5, 2.0, 1.5, 1.0, .5, and 0 are awarded in cases in which students' projects do not fully achieve all criteria described for excellence. Circled items are areas for improvement.

Keep the important ideas in sight and in mind.

TIERING

Samples of Tiered Tasks

Grade Level Task:

- **Draw and correctly label the plot profile of a novel.**

Advanced Level Tasks:

- **Draw and correctly label the general plot profile for a particular genre of books.**
- **Draw and correctly label the plot profile of a novel and explain how the insertion or deletion of a particular character or conflict will impact the profile's line, then judge whether or not this change would improve the quality of the story.**

Samples of Tiered Tasks

Early Readiness Level Tasks:

- **Draw and correctly label the plot profile of a short story.**
- **Draw and correctly label the plot profile of a single scene.**
- **Given a plot profile of a novel, correctly label its parts.**
- **Given a plot profile with mistakes in its labeling, correct the labels.**

Tiering

Common Definition -- Adjusting the following to maximize learning:

- Readiness**
- Interest**
- Learning Profile**

Rick's Preferred Definition:

- Changing the level of complexity or required readiness of a task or unit of study in order to meet the developmental needs of the students involved (Similar to Tomlinson's "Ratcheting")**

Scaffolding -- Providing extended and direct support to students, then slowly pulling pieces of this support away until the student is autonomous regarding the skill or content

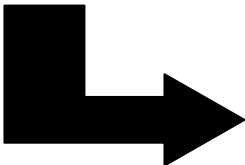
Tiering – Changing the level of complexity or required readiness of a task or unit of study in order to meet the developmental needs of the students involved

Tiering Assignments and Assessments

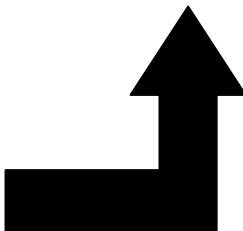
Example -- Graph the solution set of each of the following:

1. $y > 2$ 2. $6x + 3y \leq 2$ 3. $-y < 3x - 7$

2. $6x + 3y \leq 2$
 $3y \leq -6x + 2$
 $y \leq -2x + 2/3$



x	y
0	$2/3$
3	$-5 \frac{1}{3}$



Given these two ordered pairs, students would then graph the line and shade above or below it, as warranted.

Tiering Assignments and Assessments

For *early* readiness students:

- Limit the number of variables for which student must account to one in all problems.
($y > 2$)
- Limit the inequality symbols to, “greater than” or, “less than,” not, “greater than or equal to” or, “less than or equal to”
- Provide an already set-up 4-quadrant graph on which to graph the inequality
- Suggest some values for x such that when solving for y , its value is not a fraction.

Tiering Assignments and Assessments

For *advanced* readiness students:

- Require students to generate the 4-quadrant graph themselves
- Increase the parameters for graphing with equations such as: $-1 \leq y \leq 6$
- Ask students what happens on the graph when a variable is given in absolute value, such as: $|y| > 1$
- Ask students to graph two inequalities and shade or color only the solution set (where the shaded areas overlap)

Tiering Assignments and Assessments -- Advice

- **Begin by listing every skill or bit of information a student must use in order to meet the needs of the task successfully. Most of what we teach has subsets of skills and content that we can break down for students and explore at length.**

Tiering Assignments and Assessments -- Advice

- **Tier tasks by designing the full-proficiency version first, then design the more advanced level of proficiency, followed by the remedial or early-readiness level, as necessary.**

Tiering Assignments and Assessments -- Advice

- **Respond to the unique characteristics of the students in front of you. Don't always have high, medium, and low tiers.**

Tiering Assignments and Assessments -- Advice

- **Don't tier every aspect of every lesson. It's often okay for students to do what everyone else is doing.**

Tiering Assignments and Assessments -- Advice

- **When first learning to tier, stay focused on one concept or task.**

To Increase (or Decrease) a Task's Complexity, Add (or Remove) these Attributes:

- **Manipulate information, not just echo it**
- **Extend the concept to other areas**
- **Integrate more than one subject or skill**
- **Increase the number of variables that must be considered; incorporate more facets**
- **Demonstrate higher level thinking, i.e. Bloom's Taxonomy, William's Taxonomy**
- **Use or apply content/skills in situations not yet experienced**
- **Make choices among several substantive ones**
- **Work with advanced resources**
- **Add an unexpected element to the process or product**
- **Work independently**
- **Reframe a topic under a new theme**
- **Share the backstory to a concept – how it was developed**
- **Identify misconceptions within something**

To Increase (or Decrease) a Task's Complexity, Add (or Remove) these Attributes:

- **Identify the bias or prejudice in something**
- **Negotiate the evaluative criteria**
- **Deal with ambiguity and multiple meanings or steps**
- **Use more authentic applications to the real world**
- **Analyze the action or object**
- **Argue against something taken for granted or commonly accepted**
- **Synthesize (bring together) two or more unrelated concepts or objects to create something new**
- **Critique something against a set of standards**
- **Work with the ethical side of the subject**
- **Work in with more abstract concepts and models**
- **Respond to more open-ended situations**
- **Increase their automacity with the topic**
- **Identify big picture patterns or connections**
- **Defend their work**

- **Manipulate information, not just echo it:**
 - “Once you’ve understood the motivations and viewpoints of the two historical figures, identify how each one would respond to the three ethical issues provided.”
- **Extend the concept to other areas:**
 - “How does this idea apply to the expansion of the railroads in 1800’s?” or, “How is this portrayed in the Kingdom Protista?”
- **Work with advanced resources:**
 - “Using the latest schematics of the Space Shuttle flight deck and real interviews with professionals at Jet Propulsion Laboratories in California, prepare a report that...”
- **Add an unexpected element to the process or product:**
 - “What could prevent meiosis from creating four haploid nuclei (gametes) from a single haploid cell?”

- **Reframe a topic under a new theme:**
 - “Re-write the scene from the point of view of the antagonist,” “Re-envision the country’s involvement in war in terms of insect behavior,” or, “Re-tell Goldilocks and the Three Bears so that it becomes a cautionary tale about McCarthyism.”
- **Synthesize (bring together) two or more unrelated concepts or objects to create something new:**
 - “How are grammar conventions like music?”
- **Work with the ethical side of the subject:**
 - “At what point is the Federal government justified in subordinating an individual’s rights in the pursuit of safe-guarding its citizens?”

The Equalizer

(Carol Ann Tomlinson)

Foundational -----	Transformational
Concrete -----	Abstract
Simple -----	Complex
Single Facet/fact -----	Multi-Faceted/facts
Smaller Leap -----	Greater Leap
More Structured -----	More Open
Clearly Defined -----	Fuzzy Problems
Less Independence -----	Greater Independence
Slower -----	Quicker

William's Taxonomy

Fluency

Flexibility

Originality

Elaboration

Risk Taking

Complexity

Curiosity

Imagination

Frank Williams' Taxonomy of Creative Thinking

Fluency – We generate as many ideas and responses as we can

Example Task: Choose one of the simple machines we've studied (wheel and axle, screw, wedge, lever, pulley, and inclined plane), and list everything in your home that uses it to operate, then list as many items in your home as you can that use more than one simple machine in order to operate.

Flexibility – We categorize ideas, objects, and learning by thinking divergently about them

Example Task: Design a classification system for the items on your list.

Frank Williams' Taxonomy of Creative Thinking

Originality – We create clever and often unique responses to a prompt

Example Task: Define life and non-life.

Elaboration – We expand upon or stretch an idea or thing, building on previous thinking

Example: What inferences about future algae growth can you make, given the three graphs of data from our experiment?

Frank Williams' Taxonomy of Creative Thinking

Risk Taking – We take chances in our thinking, attempting tasks for which the outcome is unknown

Example: Write a position statement on whether or not genetic engineering of humans should be funded by the United States government.

Complexity – We create order from chaos, we explore the logic of a situation, we integrate additional variables or aspects of a situation, contemplate connections

Example: Analyze how two different students changed their lab methodology to prevent data contamination.

Frank Williams' Taxonomy of Creative Thinking

Curiosity – We pursue guesses, we wonder about varied elements, we question.

Example: What would you like to ask someone who has lived aboard the International Space Station for three months about living in zero-gravity?

Imagination – We visualize ideas and objects, we go beyond just what we have in front of us

Example: Imagine building an undersea colony for 500 citizens, most of whom are scientists, a kilometer below the ocean's surface. What factors would you have to consider when building and maintaining the colony and the happiness of its citizens?

Cubing

Ask students to create a 3-D cube out of foam board or posterboard, then respond to one of these prompts on each side:

Describe it, Compare it, Associate it, Analyze it, Apply it, Argue for it or against it.

We can also make higher and lower-level complexity cubes for varied groups' responses.

R.A.F.T.S.

R = Role, A = Audience, F = Form, T = Time or Topic, S = Strong adverb or adjective

Students take on a role, work for a specific audience, use a particular form to express the content, and do it within a time reference, such as pre-Civil War, 2025, or ancient Greece.

Sample assignment chosen by a student:

A candidate for the Green Party (role), trying to convince election board members (audience) to let him be in a national debate with Democrats and the Republicans. The student writes a speech (form) to give to the Board during the Presidential election in 2004 (time). Within this assignment, students use arguments and information from this past election with third party concerns, as well as their knowledge of the election and debate process. Another student could be given a RAFT assignment in the same manner, but this time the student is a member of the election board who has just listened to the first student's speech.

R.A.F.T.S.

Raise the complexity: Choose items for each category that are farther away from a natural fit for the topic . Example: When writing about Civil War Reconstruction, choices include a rap artist, a scientist from the future, and Captain Nemo.

Lower the complexity: Choose items for each category that are closer to a natural fit for the topic. Example: When writing about Civil War Reconstruction, choices include a member of the Freedmen's Bureau, a southern colonel returning home to his burned plantation, and a northern business owner

Learning Menus

Similar to learning contracts, students are given choices of tasks to complete in a unit or for an assessment.

“Entrée” tasks are required, they can select two from the list of “side dish” tasks, and they can choose to do one of the “desert” tasks for enrichment.

(Tomlinson, *Fulfilling the Promise of the Differentiated Classroom*, 2003)

Tic-Tac-Toe Board

	Summarize (Describe)	Compare (Analogy)	Critique
Geometry			
A Theorem			
An math tool			
Future Developments			

Interpersonal	Kinesthetic	Naturalist
Logical	Student Choice (Task 5)	Intrapersonal
Interpersonal and Verbal	Musical	Verbal

Change the Verb

Instead of asking students to describe how FDR handled the economy during the Depression, ask them to rank four given economic principles in order of importance as they imagine FDR would rank them, then ask them how President Hoover who preceded FDR would have ranked those same principles differently.

Analyze...

Revise...

Decide between...

Why did...

Defend...

Devise...

Identify...

Classify...

Define...

Compose...

Interpret...

Expand...

Develop...

Suppose...

Imagine...

Construct...

Rank...

Argue against...

Argue for...

Contrast...

Develop...

Plan...

Critique...

Rank...

Organize...

Interview...

Predict...

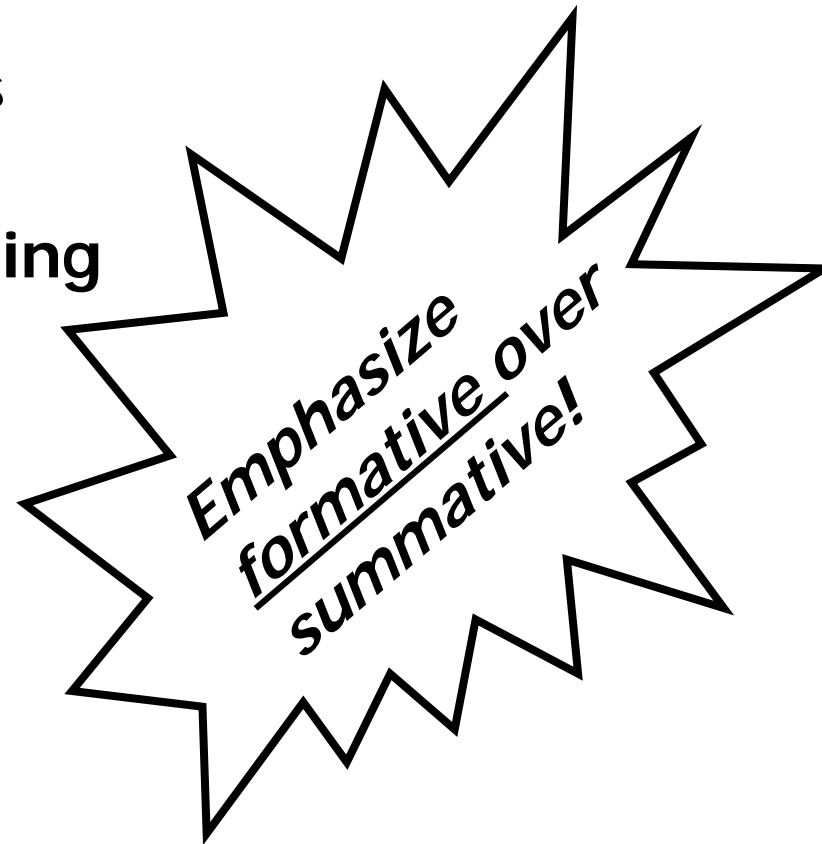
Categorize...

Invent...

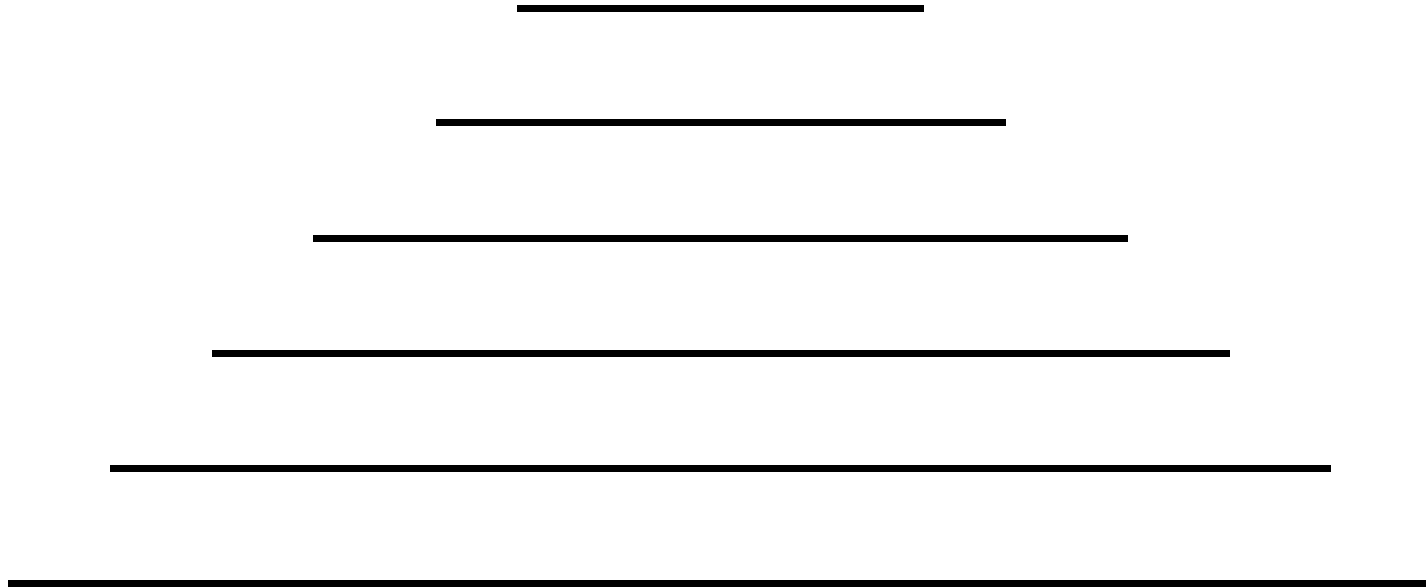
Recommend...

Vary the Assessment Formats

- Skill demonstrations
- Portfolios
- Writings and Compositions
- Reflective analysis
- Artistic – Fine and Performing
- Short
- Tests and quizzes
- Projects
- Oral presentations
- Real-life and Alternative Applications
- Group tasks and activities
- Problem-solving
- Laboratory experiments



Summarization Pyramid



Great prompts for each line: *Synonym, analogy, question, three attributes, alternative title, causes, effects, reasons, arguments, ingredients, opinion, larger category, formula/sequence, insight, tools, misinterpretation, sample, people, future of the topic*

One-Word Summaries

“The new government regulations for the meat-packing industry in the 1920’s could be seen as an opportunity...,”

“Picasso’s work is actually an argument for....,”

“NASA’s battle with Rockwell industries over the warnings about frozen temperatures and the O-rings on the space shuttle were trench warfare....”

Basic Idea: Argue for or against the word as a good description for the topic.

Additional Differentiated Instruction Strategies

- **Use Interactive Notebooks:** Students record information and skills they learn, then make personal responses to their learning, followed by teachers responding to students' explorations. The notebook contains everything that is "testable" from the lessons, including handouts, charts, graphics, discussion questions, essays, and drawings. In addition to teachers' insights into students' thinking, the notebooks provide students themselves with feedback on their own learning.

***Notebook Know-How* by Aimee Bruckner (2005)**
(www.stenhouse.com)

<http://interactivenotebook.jot.com/WikiHome>

**www.historyalive.com (from the Teachers' Curriculum
Institute)**

http://pages.prodigy.net/wtrucillo/interactive_notebook

Learning Contracts

Some contracts indicate working behaviors as contractual stipulations. The student will:

- **Work without bothering others**
- **Use an indoor voice**
- **Avoid interrupting the teacher when she is teaching**
- **Bring two sharpened pencils and ample paper supply to class every day**
- **When stuck on something but the teacher isn't available to help at the moment, do something on the posted classroom options list**

Checkpoints:

These are dates and descriptions that indicate when each item will be submitted for teacher assessment. Checkpoints serve two purposes: 1) For the teacher to assess student progress and possibly change instruction as a result, and 2) to keep students dedicated to the tasks and learning.

Basic Components – Clearly stated:

- **Student and Teacher responsibilities**
- **Teacher expectations of Student**
- **Consequences for the student if he does not live up to responsibilities and expectations**
- **Spaces for both teacher and student to evaluate the success of each task**
- **Opportunities for students to go beyond the basic requirements of the contract, if interested, are described**
- **Spaces for dates and signatures, signifying agreement to the contract's stipulations by both teacher and student**
- **Space for parents' signatures**

It is understood that:

A learning contract is an alternative experience, not to be taken for granted by students. If a student breaks any portion of the contract, then the contract becomes null and void at teacher discretion, and the student must return to what the rest of the class is doing. Because a contract's tasks are done in lieu of the regular class's tasks, teachers make sure everything the rest of the class is learning is provided in alternative contracts negotiated by students.

Science Class: The student will complete the following tasks by December 10th:

- **Build and maintain a healthy terrarium for four weeks that contains all the elements listed on the accompanying direction sheet.**
- **Explain in writing how each element influences the health of the terrarium.**
- **Read and take notes on Chapter 13 “Habitats and Biomes” in the Life Science textbook using one of the five note-taking techniques we’ve learned this year.**
- **In writing, answer the questions on pages 137-139 at the end of Chapter 13, and design one more analysis question for the chapter and answer it.**
- **View the video, “At Home in the Biome,” and create a matrix graphic organizer that identifies the five biomes described in the video according to: water sources, climate, typical flora, typical fauna, geographic location, and sample food chain**
- **Identify five limiting factors for a local habitat’s carrying capacity and one action per factor that our community can take to remove those factors from limiting the habitat**
- **Write a personal mission statement about your dedication to protecting our natural resources. It must include your definition of natural resources, why it’s important to protect them, and what specific steps you’ll take to keeping them healthy for generations to come.**

Enrichment Opportunities

- **Create a diorama, Web site, or public library display that accurately portrays the food, water, space, shelter, and arrangement for any three animals, each from a different biome, and include a statement as to why it's important to understand an animal's habitat elements.**
- **Create a poem or artistic performance (fine or performing art) that expresses the interconnectedness of the food chain or web of life. Specific elements of the energy transfer cycle must be included.**

While working on these tasks during contract time, the student will:

- **Use time wisely**
- **Ask questions when he doesn't understand something**
- **Avoid bothering other students**
- **Come to class prepared with two pencils, plenty of paper, rough drafts of writings, and his textbook**
- **Speak in a quiet indoor voice**
- **Stay in his seat unless obtaining something or information for his contractual tasks**
- **Not work on homework from other classes**

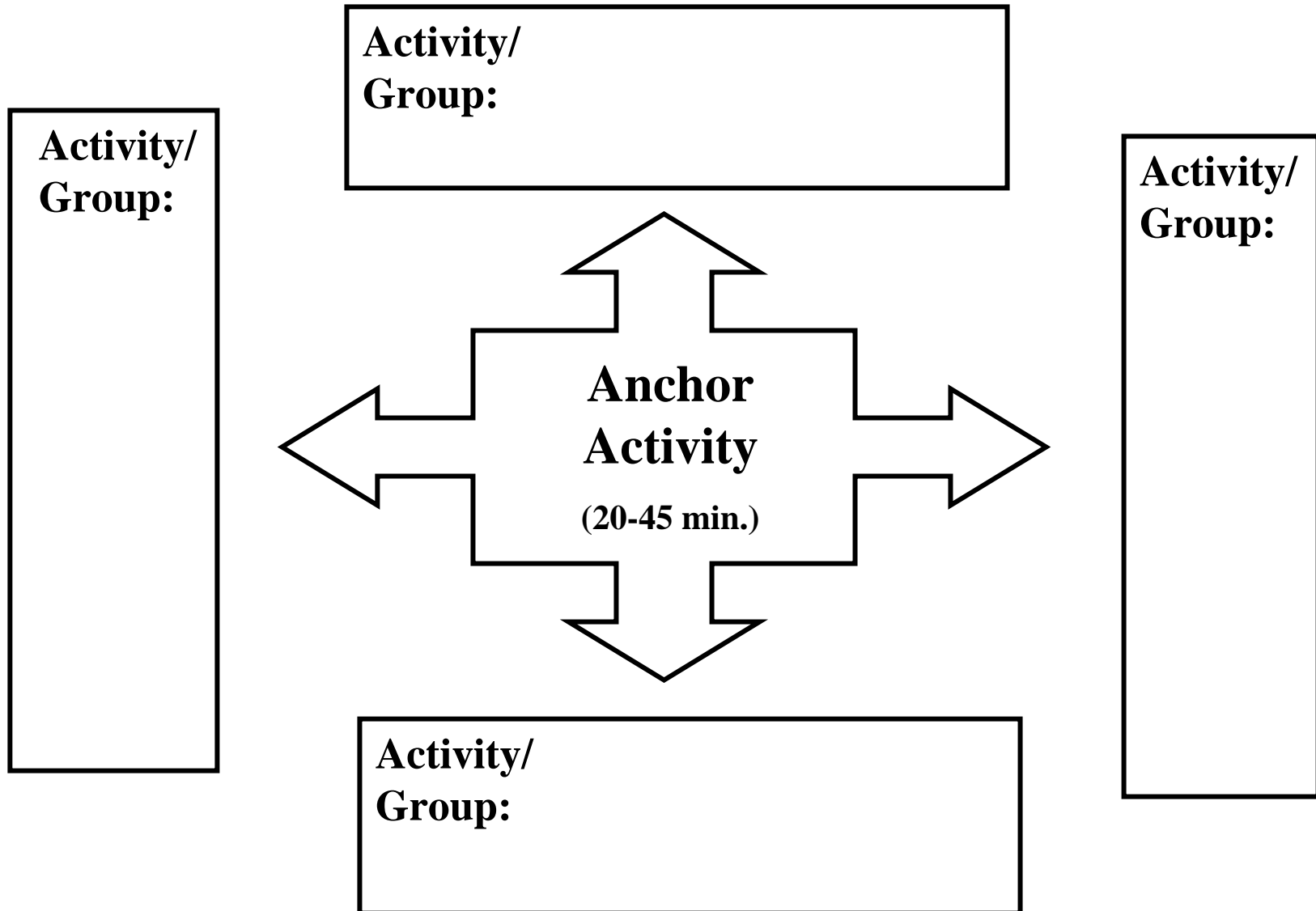
Contractual Consequences

“ All grades earned on each of the contract’s tasks will be used to determine the student’s official grade for this unit of study. If any portion of this contract is not achieved in the time and manner specified, it becomes null and void at teacher discretion. In such instances, the student may be required to end all contractual tasks and return to what the rest of the class is doing without complaint.”

Questions to Consider when Tiering

- Are we supposed to hold them accountable for everything?
- Are we just taking things off their plate, and is that okay?
- How do we assign equitable grades when we tier?
- When we tier, are we just saying that we're making things easier or harder?
- Do we let all students try the more complex assessments if they want to do so, even if they're not ready?
- Do we let advanced students "get by" by doing less complex work occasionally? Can students occasionally negotiate the level at which they are asked to perform?
- How do I manage the classroom when I'm tiering?

Anchor Lesson Design



Anchor Activities Advice

- Use activities with multiple steps to engage students
- Require a product – ‘increases urgency and accountability
- Train students what to do when the teacher is not available
- Start small: Half the class and half the class, work toward more groups, smaller in size
- Use a double t-chart to provide feedback
- Occasionally, videotape and provided feedback

Double-T Charts

[eye]	[ear]	[heart]
Char.'s of success we'd <u>see</u>	Char.'s of success we'd we'd <u>hear</u>	Char.'s of success we'd <u>feel</u>

Anchor Activities Advice, continued

- Task cards may help
- Use and train students in attention signals
- “Fish Bowl”
- Scaffolding
- Examples and Non-examples
- 20-45 minutes in length for secondary students, 10-20 minutes for primary and early elementary students
- Train students in how to disengage from one activity and move back into another one successfully

What to Do

When the Teacher is Not Available

- **Move on to the next portion; something may trigger an idea**
- **Draw a picture of what you think it says or asks**
- **Re-read the directions or previous sections, re-read them aloud**
- **Find a successful example and study how it was done**
- **Ask a classmate (“Ask Me,” “Graduate Assistant,” “Technoids”)**
- **Define difficulty vocabulary**
- **Try to explain it to someone else**

Sample Anchor Activities

History:

Read pages 45-52 on the Industrial Revolution. Identify the five policies/ideas for which the meat-packing industry labor unions were fighting, then design a flag that incorporates symbols of each of those ideas in its pattern. Write a short paragraph describing the flag's symbols.

Math:

Identify the number of faces, edges, and vertices for each of the following 3-dimensional shapes: cube, rectangular prism, rectangular pyramid, triangular pyramid, triangular prism, pentagonal pyramid, pentagonal prism, cylinder. Then draw the patterns on paper that, when folded and edges taped together, would create each of these shapes. Then, actually build each 3-d shape from your 2-d drawings.

Sample Anchor Activities, continued

Language Arts:

Draw and label the plot profile of the novel. Then, draw a second plot profile of the same story, but this time pretend a character from another book is inserted into the story at the midpoint and has a major influence on the outcome of the story. Draw the new changes in the plot profile and explain in writing how the story might change as a result of this new character being added.

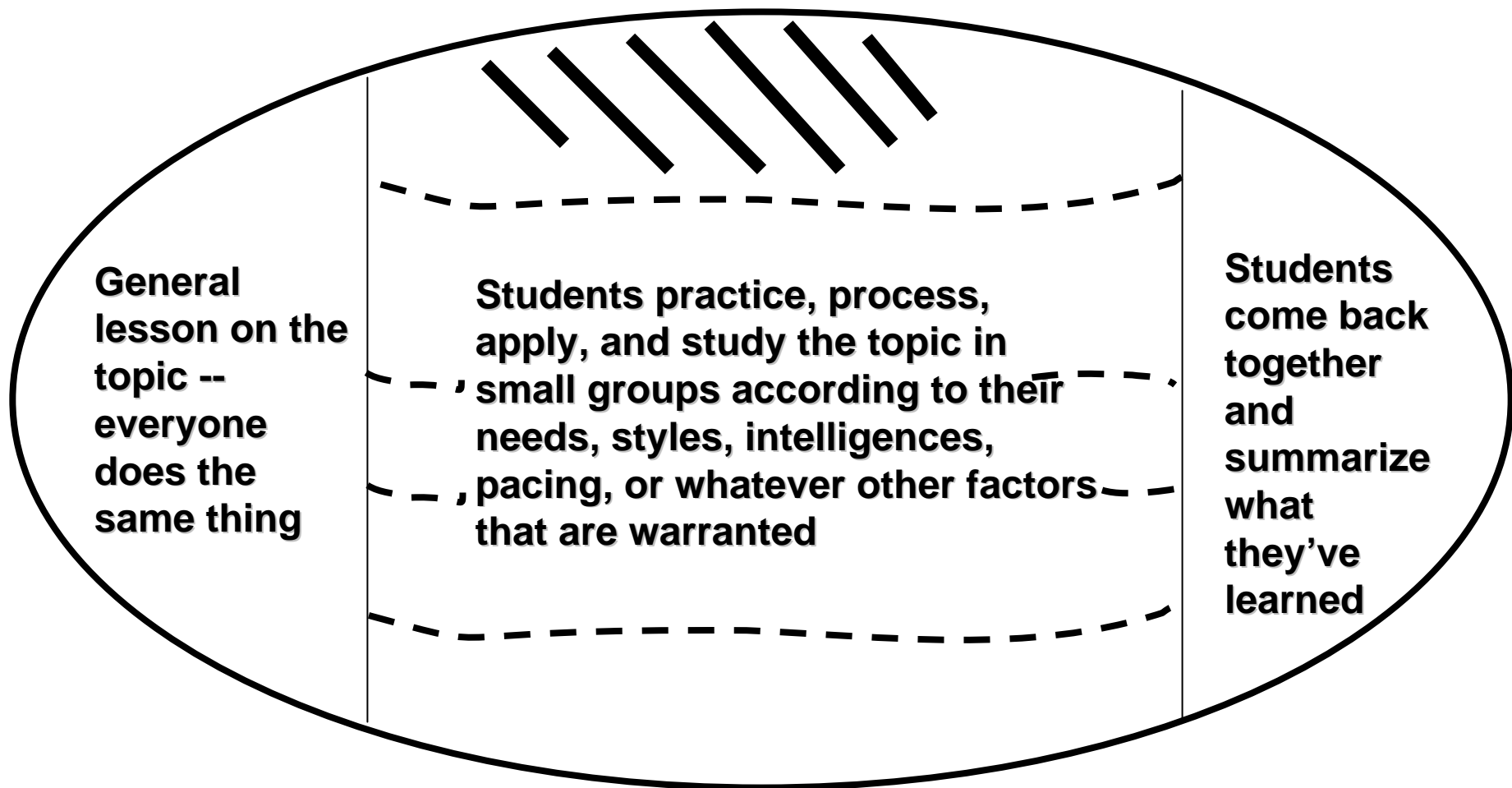
Science:

Draw two graphs to represent the data collected in the experiment: One that provides us with an accurate portrayal of what happened, and one that changes the vertical scale and thereby distorts our interpretations of the data. Write an explanation on the importance of proper scale when graphing data, including how data can be misinterpreted based on the scale used in data's graphing. Finally, choose one of the sample graphs of data given to you and explain whether or not the scale was appropriate for the data – does it lead to accurate interpretations?

The Football Sequence

1. First teach a general lesson to the whole class for the first 10 to 15 minutes.
2. After the general lesson, divide the class into groups according to readiness, interest, or learning profile and allow them to process the learning at their own pace or in their own way. This lasts for 15 to 20 minutes. We circulate through the room, clarifying directions, providing feedback, assessing students, and answering questions. This section is very expandable to help meet the needs of students.
3. Bring the class back together as a whole group and process what they've learned. This can take the form of a summarization, a Question and Answer session, a quick assessment to see how students are doing, or some other specific task that gets students to debrief with each other about what they learned. This usually takes about 10 minutes.

The football metaphor comes from the way we think about the lesson's sequence: a narrow, whole class experience in the beginning, a wider expansion of the topic as multiple groups learn at the own pace or in their own ways, then narrowing it back as we re-gather to process what we've learned.



**“Even the man on the
right track will get run over if
he just stands there.”**

-- Will Rogers

**“Don’t let anything hit you in the
rear end.” ☺**

-- Rick Wormeli

GRADING

Why Do We Grade?

- Provide feedback
 - Document progress
 - Guide instructional decisions
-

- Motivate
- Punish
- Sort students

What about incorporating *attendance*, *effort*, and *behavior* in the final grade?

Consider...

- **Teaching and learning can and do occur without grades.**
- **We do not give students grades in order to teach them.**
- **Grades reference summative experiences** – cumulative tests, projects, demonstrations
- **Students can learn without grades, but they must have feedback.**

Premise

A grade represents a valid and undiluted indicator of what a student knows and is able to do – mastery.

With grades we document progress in students and our teaching, we provide feedback to students and their parents, and we make instructional decisions.

10 Practices to Avoid in a Differentiated Classroom

[They Dilute a Grade's Validity and Effectiveness]

- **Penalizing students' multiple attempts at mastery**
- **Grading practice (daily homework) as students come to know concepts [Feedback, not grading, is needed]**
- **Withholding assistance (not scaffolding or differentiating) in the learning when it's needed**
- **Group grades**
- **Incorporating non-academic factors (behavior, attendance, and effort)**

- **Assessing students in ways that do not accurately indicate students' mastery (student responses are hindered by the assessment format)**
- **Grading on a curve**
- **Allowing Extra Credit**
- **Defining supposedly criterion-based grades in terms of norm-referenced descriptions (“above average,” “average”, etc.)**
- **Recording zeroes for work not done**

0 to 60?

100-pt. Scale:

0, 100, 100, 100, 100, 100 -- 83% (C+)

60, 100, 100, 100, 100, 100 -- 93% (B+)

4-pt. Scale:

0, 4,4,4,4,4 -- 83% (C+)

1, 4,4,4,4,4 -- 88% (B)

When working with students,
do we choose the most hurtful,
unrecoverable end of the "F"
range, or the most
constructive, recoverable end
of the "F" range?

Be clear: Students are not getting points for having done nothing. The student still gets an F. We're simply equalizing the influence of the each grade in the overall grade and responding in a way that leads to learning.

Imagine the Reverse...

$$A = 100 - 40$$

$$B = 39 - 30$$

$$C = 29 - 20$$

$$D = 19 - 10$$

$$F = 9 - 0$$

What if we reversed the proportional influences of the grades? That “A” would have a huge, yet undue, inflationary effect on the overall grade. Just as we wouldn’t want an “A” to have an inaccurate effect, we don’t want an “F” grade to have such an undue, deflationary, and inaccurate effect. Keeping zeroes on a 100-pt. scale is just as absurd as the scale seen here.

100	4
90	3
80	2
70	1
60	0
50	-1
40	-2
30	-3
20	-4
10	-5
0	-6

Consider the Correlation

A (0) on a 100-pt. scale is a (-6) on a 4-pt. scale. If a student does no work, he should get nothing, not something worse than nothing. How instructive is it to tell a student that he earned six times less than absolute failure? Choose to be instructive, not punitive.

[Based on an idea by Doug Reeves, *The Learning Leader*, ASCD, 2006]

Temperature Readings for Norfolk, VA:

85, 87, 88, 84, 0  ('Forgot to take the reading)

Average: 68.8 degrees

**This is inaccurate for what really
happened, and therefore, unusable.**

Clarification:

When we're talking about converting zeroes to 50's or higher, we're referring to zeroes earned on major projects and assessments, not homework, as well as anything graded on a 100-point scale. It's okay to give zeroes on homework or on small scales, such as a 4.0 scale. Zeroes recorded for homework assignments do not refer to final, accurate declarations of mastery, and those zeroes don't have the undue influence on small grading scales.

Grading Late Work

- One whole letter grade down for each day late is punitive. It does not teach students, and it removes hope.
- A few points off for each day late is instructive; there's hope.
- Yes, the world beyond school is like this.

Helpful Consideration for Dealing with Student's Late Work:

Is it chronic....

...or is it occasional?

*We respond differently,
depending on which one it is.*

Are we interested more in holding students
accountable
or making sure they learn?

Avoid, “learn or I will hurt you” measures.
(Nancy Doda)

This quarter, you've taught:

- **4-quadrant graphing**
- **Slope and Y-intercept**
- **Multiplying binomials**
- **Ratios/Proportions**
- **3-dimensional solids**
- **Area and Circumference of a circle.**

The student's grade: B

What does this mark tell us about the student's proficiency with each of the topics you've taught?

Unidimensionality – A single score on a test represents a single dimension or trait that has been assessed

Student	Dimension A	Dimension B	Total Score
1	2	10	12
2	10	2	12
3	6	6	12

Problem: Most tests use a single score to assess multiple dimensions and traits. The resulting score is often invalid and useless. -- Marzano, CAGTW, page 13

Setting Up Gradebooks in a Differentiated Classroom

- Avoid setting up gradebooks according to formats or media used to demonstrate mastery: *tests, quizzes, homework, projects, writings, performances*
- Instead, set up gradebooks according to mastery: *objectives, benchmarks, standards, learner outcomes*

Responsive Report Formats

Adjusted Curriculum Approach:

Grade the student against his own progression, but indicate that the grade reflects an adjusted curriculum. Place an asterisk next to the grade or check a box on the report card indicating such, and include a narrative comment in the cumulative folder that explains the adjustments.

Responsive Report Formats

Progression and Standards Approach:

Grade the student with two grades, one indicating his performance with the standards and another indicating his own progression. A, B, C, D, or F indicates the student's progress against state standards, while 3, 2, or 1 indicates his personal progression.

Responsive Report Formats

Multiple Categories Within Subjects Approach:

**Divide the grade into its component pieces.
For example, a “B” in Science class can be subdivided into specific standards or benchmarks such as, “Demonstrates proper lab procedure,” “Successfully employs the scientific method,” or “Uses proper nomenclature and/or taxonomic references.”**

The more we try to aggregate into a single symbol, the less reliable that symbol is as a true expression of what a student knows and is able to do.

Report Cards without Grades

Course: English 9	Standard Descriptor	Standards Rating			
		(1)	(2)	(3)	(4)
Standard 1	Usage/Punct/Spelling	-----2.5			
Standard 2	Analysis of Literature	-----1.75			
Standard 3	Six + 1 Traits of Writing	-----3.25			
Standard 4	Reading Comprehension	-----3.25			
Standard 5	Listening/Speaking	-----2.0			
Standard 6	Research Skills	-----4.0			

Additional Comments from Teachers:

Health and Maturity Records for the Grading Period:

For this kind of electronic gradebook and reporting, Robert Marzano and ASCD recommend The Pinnacle Plus system by Excelsior Software.

Teachers/Parents: Mixed Priorities

- Teachers want to show how students perform against the standards and objectives
- Parents want to know, “Is my child normal, below normal, or above normal?”

(Based on comments by Grant Wiggins)

Design report cards to communicate both.

Choose the student comment to his parents we hope he will use:

1. “If I could just understand the Heisenberg’s Uncertainty Principle, I could do better on that test.”

(or)

2. “If I could just get four more problems right, I could do better on that test.”

“If we don’t count
homework heavily,
students won’t do it.”

Do you agree with this?
Does this sentiment cross a line?

Two Homework Extremes that Focus Our Thinking

- **If a student does none of the homework assignments, yet earns an “A” (top grade) on every formal assessment we give, does he earn anything less than an “A” on his report card?**
- **If a student does all of the homework well yet bombs every formal assessment, isn't that also a red flag that something is amiss, and we need to take corrective action?**

100 point scale or 4.0 Scale?

- **A 4.0 scale has a high inter-rater reliability. Students' work is connected to a detailed descriptor and growth and achievement rally around listed benchmarks.**
- **In 100-point or larger scales, the grades are more subjective. In classes in which teachers use percentages or points, students, teachers, and parents more often rally around grade point averages, not learning.**

Consider:

- **Pure mathematical averages of grades for a grading period are inaccurate indicators of students' true mastery.**
- **A teacher's professional judgment via clear descriptors on a rubric actually increases the accuracy of a student's final grade as an indicator of what he learned.**
- **A teacher's judgment via rubrics has a stronger correlation with outside standardized tests than point or average calculations do.**

(Marzano)

Office of Educational Research and Improvement Study (1994):

Students in impoverished communities that receive high grades in English earn the same scores as C and D students in affluent communities.

Math was the same: High grades in impoverished schools equaled only the D students' performance in affluent schools.

Accurate grades are based on the most consistent evidence. We look at the pattern of achievement, including trends, not the average of the data. This means we focus on the median and mode, not mean, and the most recent scores are weighed heavier than earlier scores.

Median: The middle test score of a distribution, above and below which lie an equal number of test scores

Mode: The score occurring most frequently in a series of observations or test data

Allowing Students to Re-do Assignments and Tests for Full Credit:

- **Always, “...at teacher discretion.”**
- **It must be within reason.**
- **Students must have been giving a sincere effort.**
- **Require parents to sign the original assignment or test, requesting the re-do.**
- **Require students to submit a plan of study that will enable them to improve their performance the second time around.**

Allow Students to Re-do Assignments and Tests for Full Credit:

- Identify a day by which time this will be accomplished or the grade is permanent.**
- With the student, create a calendar of completion that will help them achieve it.**
- Require students to submit original with the re-done version so you can keep track of their development**
- Reserve the right to give alternative versions**
- No-re-do's the last week of the grading period**
- Sometimes the greater gift is to deny the option.**

Successful differentiated grading emphasizes formative over summative assessment. So:

- **Shorten assignments. (1-page writings are challenging and effective. Go for concept development over automacity.)**
- **Find ways to provide feedback other than the teacher.**
- **Provide detailed feedback along the way; don't wait until everything's done.**
- **Make sure students get feedback within three days, if possible.**
- **Every time you design formal lessons and assessments, also plan for how students will receive timely and regular feedback.**

Inclusion – Clarifying Philosophies

Before partnering and frequently throughout the partnering, clarify:

- Each person's role**
- Acceptable grading policies**

Administrative direction on these are critical.

Inclusion – Focus

- All students in the inclusion/regular class are considered to be the regular education teacher's students.
- Focus of Regular Education teacher: the mandated curriculum and each student's progress toward mastering it. 'Has expertise in the subject and the teaching of it.
- Focus of the Special Education teacher: how to teach students with identified needs, as well as students' individualized education plans. 'Informs the regular education teacher of those goals and works with the regular education teacher to make accommodations necessary for identified students to achieve the regular education standards/objectives. 'May or may not have expertise in the class's curriculum.

Inclusion:
Potential Regular Education Teacher Concern

Concern: Providing accommodations for special needs students dilutes the rigor of learning and accountability for those students. Any high grades earned by those students do not equal the same, high standards of excellence earned by regular education students who've also earned those high grades. 'Has trouble recording those special needs students' high grades on report cards.

Special education teacher may report that the student has demonstrated wonderful growth over the course of the grading and ask the grade to be high to indicate that growth.

Inclusion:

Potential Regular Education Teacher Concern (continued)

Question: Should the grade represent the student's progress over time or should it represent the extent of a student's mastery of standards set forth for all his classmates at this grade level in this subject?

Inclusion – Response to the Concern

If the report card allows teachers to indicate that a grade needs to be interpreted in some way when reading it (an asterisk, a checked box, a written comment), i.e. the grade does not indicate the same level of mastery as that same grade earned by other students, then the regular education teacher can relax – he's not giving a false A. It was an adjusted curriculum and the report card is marked as such. There is a clarifying note in the student's cumulative folder that describes exactly what the grade represents.

If there is no option for this on the report card, still record the higher, accurate grade, but attach an addendum explaining the level of mastery obtained. Remember, we do whatever it takes to keep students from throwing down the ball and going home; there has to be hope.

Inclusion – Response to the Concern

Both sides must evaluate special needs students in light of long-term goals and the curriculum. The regular education teacher identifies the standards that should have been mastered by report card time, and the special education teacher indicates whether such standards are developmentally appropriate for the student. If they are appropriate, then both teachers look for evidence of them in the students' work products: oral, written, or otherwise. If the student took a different route via accommodations but still managed to demonstrate close to what regular education students were required to demonstrate, he is graded against the expected standards for all students.

Inclusion – Response to the Concern

If the special education teacher indicates that the standards are developmentally inappropriate, then the student is evaluated against a different set of standards or modified curriculum, and both teachers identify evidence for accomplishment of those new standards. It doesn't do anyone – the student, his family, the teacher, or the school – any good to grade a student against developmentally inappropriate curriculum. Such grades are useless for instructional planning, providing feedback, or documenting progress.

**The issue is not,
“How do I equitably assign grades?”**

Instead, it's:

**“What is fair for each child?” and “What
report card feedback best represents
what a child truly learns and promotes
the most learning?”**

Grading Gifted Students

- Insure grade-level material is learned.
- If it's enrichment material only, the grade still represents mastery of on-grade-level material. An addendum report card or the comment section provides feedback on advanced material.
- If the course name indicates advanced material (Algebra I Honors, Biology II), then we grade against those advanced standards.
- If the student has accelerated a grade level or more, he is graded against the same standards as his older classmates.

Your Own Grading Philosophy Statement

Write a one- to two-page document that describes your grading policies. Write it as if parents, administrators, colleagues, and the School Board would be reading it with a critical eye. Share this document with others.

Your pedagogy becomes real and has impact only after it has been defended and criticized publicly. Otherwise, it's just an opinion or assumption. Our teaching core values are revealed and potentially transformed in the negotiation of these points with others, not in the recording of our thoughts individually.

Include in your statement your philosophy on the following:

Differentiated and fair grading

Rubrics

Modified or adjusted curriculum

Student self-assessment

Extra credit

What grades mean

Definitions of individual grades

Grading scales (100 vs 4.0)

Formative vs summative assessments

Averaging grades vs using median/mode

Grading classwork

Grading homework

The purpose of homework

**How much curriculum should be on
one test and tiering tests**

**The role of alternative
assessments**

Weighting grades

**The percent influence of
varied assessments**

Dealing with late work

**Setting up the gradebook
according to categories,
assessment formats or
standards**

**Re-doing work or tests for
full credit**

**The purpose of grades and
grading**

Recommended Reading on Assessment and Grading

- **Arter, Judith A.; McTighe, Jay; Scoring Rubrics in the Classroom : Using Performance Criteria for Assessing and Improving Student Performance, Corwin Press, 2000**
- **Benjamin, Amy. *Differentiating Instruction: A Guide for Middle and High School Teachers*, Eye on Education, 2002**
- **Borich, Gary D.; Tombari, Martin L. *Educational Assessment for the Elementary and Middle School Classroom (2nd Edition)*, Prentice Hall, 2003**
- **www.exemplars.com**
- **Heacox, Diane, Ed.D. *Differentiated Instruction in the Regular Classroom, Grades 3 – 12*, Free Spirit Publishing, 2000**
- **Lewin, Larry; Shoemaker, Betty Jean. *Great Performances: Creating Classroom-Based Assessment Tasks*, John Wiley & Sons, 1998**
- **Marzano, Robert. *Transforming Classroom Grading*, ASCD 2001**
- **Marzano, Robert. *Classroom Assessment and Grading that Work*, ASCD 2006**
- **Marzano, Robert; McTighe, Jay; and Pickering, Debra. *Assessing Student Outcomes: Performance Assessment Using the Dimensions of Learning Model*, Association for Supervision and Curriculum Development, 1993**

Recommended Reading

- Millan, James H. *Classroom Assessment: Principles and Practice for Effective Instruction (2nd Edition)*, Allyn & Bacon, 2000
- O'Connor, Ken; *How to Grade for Learning*
- Popham, W. James; *Test Better, Teach Better: The Instructional Role of Assessment*, Association for Supervision and Curriculum Development, 2003
- Popham, W. James; *Classroom Assessment : What Teachers Need to Know (4th Edition)*, Pearson Education, 2004
- Rutherford, Paula. *Instruction for All Students*, Just ASK Publications, Inc (703) 535-5432, 1998
- Stiggins, Richard J. *Student-Involved Classroom Assessment (3rd Edition)*, Prentice Hall, 2000

- **Wiggins, Grant; *Educative assessment: Assessment to Inform and Improve Performance*, Jossey-Bass Publishers, 1997**
Grant Wiggins Web site and organization:
Center on Learning, Assessment, and School Structure (CLASS)
info@classnj.org www.classnj.org
gpw@classnj.org
- **Wormeli, Rick. *Fair Isn't Always Equal: Assessment and Grading in the Differentiated Classroom*. Stenhouse Publishers, 2006**

**“I was put on earth by God
in order to accomplish a certain
number of things...
right now I am so far behind...
I will never die!”**

-Calvin and Hobbes